

anemia. A significant increase after ETD treatment would be a positive event. 2) Hematocrit. This index measures the amount of space or volume red blood cells occupy in the blood. An increase in hematocrit after ETD treatment would be a positive event. 3) Red cell distribution width (RDW). The RDW reports whether all the red cells are about the same width, size, and shape. This information will be helpful in assessing the level of anemia, and an improvement in the RDW over the two-week follow-up period would be a positive event.

[0151] An attempt will be made to correlate changes in CBC indices with changes in numerical pain and numbness ratings.

[0152] Secondary Objectives—All side effects will be noted and their relationships to the treatment process will be examined.

[0153] Safety Considerations—Magnetic field exposure from the ETD is much less than that with MRI. No precautions are required to shield patients or staff from magnetic field exposure, as the measured field strength dissipates to almost zero within approximately six inches from treatment portals. Despite the fact of considerable less ETD magnetic field strength than MRI, any patient contraindicated for MRI will not be allowed for treatment.

[0154] Adverse Experiences—All adverse experiences (AE) must be recorded and reported. The PI must also notify the RB. The sponsor will maintain records, and will include accounts of AE's, if pertinent, in future filings with the FDA.

[0155] Institutional Review—Prior to implementation of this study, the research protocol and the proposed patient consent form must be reviewed by a properly constituted Institutional Review Board. A signed and dated statement that they have approved the protocol must be submitted to the sponsor prior to the start of the study. This IRB must also approve all amendments to the protocol.

[0156] Informed Consent—Written consent will be obtained from each patient prior to entering the trial and will become part of the patient's permanent study record. Each patient will be assured that study participation is voluntary and that he/she may withdraw at any time, without penalty.

[0157] At the time of obtaining written consent, the investigator will advise patients of the experimental nature of the device, the duration of the trial, alternate modes of treatment, and prevalent adverse reactions that might occur. The patient's signature is to be witnessed.

[0158] Reporting and Recording of Data—All information required by the protocol is to be provided, or an explanation given for omissions. All data and information will be typed or legibly printed in black ink for ease of duplication interpretation and analysis.

[0159] Recruiting for this trial will be from the PI's clinical practice, from his professional colleagues, from word of mouth, and from newspaper, television, and interest-group advertising.

What is claimed is:

1. A system for treating a human being comprising:

an electrical current source;

a housing with an aperture that permits insertion of a human appendage wherein said aperture is lined with a tubular sleeve; and

a coil that generates a magnetic field coupled to said electrical current source wherein said coil surrounds said aperture and generates a magnetic field within said aperture; and

wherein said coil is configured such that an appendage placed within said aperture is exposed to a magnetic field of approximately 3% to 5% of the field produced by a Magnetic Resonance Imaging device.

2. The system of claim 1 wherein said electrical current source is a direct current electrical current source.

3. The system of claim 1 wherein said electrical current source produces a modulated current flow.

4. The system of claim 3 wherein said modulated current source has at least 100 pulses per second.

5. The system of claim 1 wherein said tubular sleeve is comprised of a first type of metal and said housing is comprised of a second type of metal wherein the extraneous magnetic field outside of said housing is less than the extraneous magnetic field outside of said housing of a system where said housing is comprised of said first type of metal.

6. The system of claim 1 wherein said housing is comprised of ferrous metal and said tubular sleeve is comprised of stainless steel.

7. The system of claim 1 wherein the diameter of said coil is greater than the depth of said coil.

8. The system of claim 3 wherein the diameter of said coil is greater than the depth of said coil.

9. The system of claim 4 wherein the diameter of said coil is greater than the depth of said coil.

10. The system of claim 1 further comprising a means for cooling said coil.

11. The system of claim 10 wherein said means for cooling comprises silicon oil.

12. The system of claim 1 further comprising a cooling liquid configured to absorb heat generated by said coil.

13. The system of claim 12 wherein said cooling liquid comprises silicon oil.

14. The system of claim 10 further comprising an insulating sleeve surrounding said coil configured to allow a cooling liquid to flow within said insulating sleeve.

15. The system of claim 13 further comprising an insulating sleeve surrounding said coil configured to allow said silicon oil to flow within said insulating sleeve.

16. The system of claim 1 wherein the strength of said magnetic field within said aperture is substantially homogeneous.

17. The system of claim 6 wherein the strength of said magnetic field within said aperture is substantially homogeneous.

18. A method for treating diseased or abnormal conditions within a person's comprising the steps of: